




Form PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 7-80) PATENT AND TRADEMARK OFFICE		ATTORNEY DOCKET NO.: 01173.0015U3		SERIAL NO. 09/855,170	
LIST OF PRIOR ART CITED BY APPLICANT (Use several sheets if necessary)		APPLICANT: Paul M. Lizardi			
		FILING DATE: May 14, 2001		GROUP: Unassigned	
U.S. PATENT DOCUMENTS					
EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS SUBCLASS FILING DATE IF APPROPRIATE
Doc	A1	6,087,133	07/11/00	Dattagupta et al.	
FOREIGN PATENT DOCUMENTS					
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)					
EXAMINER: <i>Paul M. Lizardi</i>		DATE CONSIDERED: 03/04/2005			
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 <p>Form PTO-1449 U.S. DEPARTMENT OF COMMERCE (Rev. 7-80) PATENT AND TRADEMARK OFFICE</p> <p><b>LIST OF PRIOR ART CITED BY APPLICANT</b> (Use several sheets if necessary)</p>	<b>ATTORNEY DOCKET NO.:</b> 01173.0015U3	<b>SERIAL NO.</b> 09/855,170 <b>CONFIRMATION NO.</b> 8924
	<b>APPLICANT:</b> Lizardi	
	<b>FILING DATE:</b> May 14, 2001	<b>GROUP:</b> 1641

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FOREIGN PATENT DOCUMENTS							

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EXAMINER: <u>Shelby A. Calvert</u>	DATE CONSIDERED: <u>03/04/2005</u>
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<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>		<p><b>Complete if Known</b></p>	
		Application Number	09/396,346 <b>09/855,170</b>
		Filing Date	September 15, 1999 <b>May 14, 2001</b>
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	<del>4643</del>
		Examiner Name	
Sheet	1	of	16
		Attorney Docket Number	YU 125 <b>25006.0006US</b>

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No.¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			
VBC		4,748,111		Dattagupat, et al.	05-31-1988	
		4,883,750		Whiteley, et al.	12-28-1989	
		4,965,188		Mullis, et al.	10-23-1990	
		4,994,373		Stavrianopoulos, et al.	02-19-1991	
		5,001,050		Blanco, et al.	03-19-1991	
		5,043,272		Hartley	08-27-1991	
		5,130,238		Malek, et al.	07-14-1992	
		5,198,543		Blanco, et al.	03-30-1993	
		5,242,794		Norman, et al.	09-07-1993	
		5,273,638		Konrad, et al.	12-28-1993	
		5,328,824		Ward, et al.	07-12-1994	
		5,354,668		Auerbach	10-11-1994	
		5,409,818		Davey, et al.	04-25-1995	
		5,412,087		McGall, et al.	05-02-1995	
		5,427,930		Birkenmeyer, et al.	06-27-1995	
		5,429,807		Matson, et al.	07-04-1995	
		5,455,166		Walker	10-03-1995	
		5,510,270		Fodor, et al.	04-23-1996	
		5,521,065		Whiteley, et al.	05-28-1996	
		5,547,843		Studier, et al.	08-20-1996	
		5,591,609		Auerbach	01-07-1997	
		5,614,389		Auerbach	03-25-1997	
		5,614,390		McCaslin, et al.	03-25-1997	
		5,629,158		Uhlen	04-13-1997	
		5,629,179		Mierendorf, et al.	05-13-1997	
		5,714,320		Kool	02-03-1998	
		5,733,733		Auerbach	03-31-1998	
		5,854,033		Lizardi	12-29-1998	

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Substitute for form 1449A/PTO		Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/396,340-1  09/855,170
		Filing Date	September 15, 1999 May 14, 2001
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	1643
		Examiner Name	
Sheet 2 of 16	Attorney Docket Number	YU 125-25006-000113	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Office. <sup>2</sup>	Number <sup>2</sup>	Kind Code <sup>3</sup> (if known)		
NGL		JP	4-262799	A		09-18-1992
		JP	4-304900	A		10-28-1992
		AU	84173/91 B		Syngene, Inc.	02-18-1992
		EP	0128 332	A1	Enzo Biochem, Inc.	12-19-1984
		EP	0356 021	A2	Imperial Chemical Ind. PLC	07-27-1989
		EP	0439 182	B1	Abbott Laboratories	04-24-1996
		EP	0466 520	A1	Life Technologies, Inc.	01-15-1992
		EP	0505 012	A2	F. Hoffmann-La Roche AG	09-23-1992
		EP	0667 393	A2	Enzo Diagnostics, Inc.	08-16-1995
		EP	0678 582	A1	Becton Dickinson and Co.	10-25-1995
		WO	91/08307	A1	Microprobe Corporation	06-13-1991
		WO	92/01813	A1	Syngene, Inc.	02-06-1992
		WO	94/24312	A2	Beckman Instruments, Inc.	10-27-1994
		WO	95/03430	A1	Gen-Probe Incorporated	02-02-1995
		WO	95/03432	A1	Bio-Rad Laboratories, Inc.	02-02-1995
		WO	95/22623	A1	Landegren	08-24-1995
		WO	95/25180	A1	Gen-Probe Inc.	09-21-1995
		WO	95/35390	A1	Mount Sinai School of Medicine of the City University of New York	12-28-1995
		WO	96/33207	A1	Glaxo Group Limited	10-24-1996
		WO	97/19193	A2	Yale University	05-29-1997
		WO	97/42346	A1	Tepnel Medical Ltd.	11-13-1997

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		Filing Date	September 16, 1999 May 14, 2000
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	1643
		Examiner Name	
Sheet 3 of 16	Attorney Docket Number	YU 125-2500-000643	

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Y <sup>2</sup>
Kce		ABRAVAYA, et al., "Detection of point mutations with a modified ligase chain reaction (Gap-LCR)," <i>Nucleic Acids Res.</i> 23(4):675-682 (1995).	
		ALIOTTA, et al., "Thermostable Bst DNA polymerase I lacks a 3'→5' proofreading exonuclease activity," <i>Genet Anal.</i> 12(5-6):185-95 (1996).	
		ALVES & CARR, "Dot blot detection of point mutations with adjacently hybridising synthetic oligonucleotide probes," <i>Nucl. Acids. Res.</i> 16:8723 (1988).	
		ARNOLD, et al., "Assay Formats Involving Acridinium-Ester-Labeled DNA Probes," <i>Clin. Chem.</i> 35(8): 1588-1594 (1989).	
		BARANY, "Genetic disease detection and DNA amplification using cloned thermostable ligase," <i>Proc. Natl. Acad. Sci. USA</i> 88: 189-193 (1991).	
		BERTINA, et al., "Mutation in blood coagulation factor V associated with resistance to activated protein C," <i>Nature</i> 369: 64-67 (1994).	
		BIRKENMEYER & MUSHAWAR, "DNA probe amplification methods," <i>Journal of Virological Methods</i> 35:117-126 (1991).	
		BLANCO & SALAS, "Characterization and purification of a phage ø29-encoded DNA polymerase required for the initiation of replication," <i>Proc. Natl. Acad. Sci.</i> 81:5325-5329 (1984).	
		BLANCO, et al., "Highly Efficient DNA Synthesis by the Phage ø29 DNA Polymerase," <i>Journal of Biological Chemistry</i> 264(15):8935-8940 (1989).	
		BLANCO, et al., "Terminal protein-primed DNA amplification," <i>Proc. Natl. Acad. Sci.</i> 91:12198-202 (1994).	

Examiner's Signature	<i>Paul M. Lizardi</i>	Date Considered	05/04/2005
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		Filing Date	September 16, 1999 <b>May 14, 2001</b>
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	1643-
		Examiner Name	
Sheet 4 of 16	Attorney Docket Number	XU426 <b>25006.0001643</b>	

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<b>See</b>		BOEHMER & LEHMAN, "Herpes Simplex Virus Type 1 ICP8: Helix-Destabilizing Properties," <i>Journal of Virology</i> 67(2):711-715 (1993).	
		BROUDE, et al., "Enhanced DNA sequencing by hybridization," <i>Proc. Natl. Acad. Sci.</i> 91:3072-76 (1994).	
		BURGESS & JACUTIN, "A new photolabile protecting group for nucleotides," <i>Am. Chem. Soc. Abstracts</i> , volume 221, abstract 281 (1996).	
		BUTLER & CHAMBERLIN, "Bacteriophage SP6-specific RNA Polymerase," <i>Journal of Biological Chemistry</i> 257:5772-5778 (1982).	
		CHATTERJEE, et al., "Cloning and overexpression of the gene encoding bacteriophage T5 DNA polymerase," <i>Gene</i> 97:13-19 (1991).	
		CHETVERINA & CHETVERIN, "Cloning of RNA molecules <i>in vitro</i> ," <i>Nucl. Acids. Res.</i> 21:2349-53 (1993).	
		DAUBENDIEK & KOOL, "Generation of catalytic RNAs by rolling transcription of synthetic DNA nanocircles," <i>Nat Biotechnol.</i> 15(3):273-7 (1997).	
		DAUBENDIEK, et al., "Rolling-circle RNA synthesis: Circular oligonucleotides as efficient substrates for T7 RNA polymerase," <i>J. Am. Chem. Soc.</i> 117:7818-19 (1995).	
		DAVANLOO, et al., "Cloning and expression of the gene for bacteriophage T7 RNA polymerase," <i>Proc. Natl. Acad. Sci. USA</i> 81:2035-2039 (1984).	
		DAVIS, et al., <i>Advanced Bacterial Genetics - A Manual for Genetic Engineering</i> (Cold Spring Harbor Laboratory, Cold Spring Harbor, N.Y., 1980).	

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		Filing Date	September 16, 1999 May 14, 2001
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	4643
		Examiner Name	
Sheet 5 of 16	Attorney Docket Number	YU 125 25006.000643	

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
ACE		DYNAL, <u>Biomagnetic Techniques in Molecular Biology</u> , 1995.	
		ERNST, et al., "Cyanine dye labeling reagents for sulphydryl groups," <i>Cytometry</i> 10:3-10 (1989).	
		FIRE & XU, "Rolling replication of short DNA circles," <i>Proc. Natl. Acad. Sci. USA</i> 92:4641-4645 (1995).	
		GASPARRO, et al., "Site-specific targeting of psoralen photoadducts with a triple helix-forming oligonucleotide: characterization of psoralen monoadduct and crosslink formation," <i>Nucleic Acids Research</i> 22(14):2845-2852 (1994).	
		GERDES, et al., "Dynamic changes in the higher-level chromatin organization of specific sequences revealed by in situ hybridization to nuclear halos," <i>J Cell Biol.</i> 126(2):289-304 (1994).	
		GUNJI, et al., "Correlation Between the Serum Level of Hepatitis C Virus RNA and Disease Activities in Acute and Chronic Hepatitis C," <i>Int. J. Cancer</i> 52(5):726-730 (1992).	
		GUO, et al., "Direct fluorescence analysis of genetic polymorphisms by hybridization with oligonucleotide arrays on glass supports," <i>Nucleic Acids Res.</i> 22(24):5456-5465 (1994).	
		GUO, et al., "Enhanced discrimination of single nucleotide polymorphisms by artificial mismatch hybridization," <i>Nature Biotechnology</i> 15:331-335 (1997).	
		GUPTA, et al., "Expression of HIV-1 RNA in plasma correlates with the development of AIDS: A multicenter AIDS cohort study," <u>Ninth International Conference on AIDS/Fourth STD World Congress</u> June 6-11, 1993, Berlin, Germany.	
		HACIA, et al., "Detection of heterozygous mutations in BRCA1 using high density oligonucleotide arrays and two-color fluorescence analysis," <i>Nature Genetics</i> 14:441-447.	

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		First Named Inventor	Paul M. Lizardi
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Sheet 6 of 16	Examiner Name		
		Attorney Docket Number	TU-123 <b>25D06 0006013</b>

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
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<b>MLC</b>		HAGIWARA, et al., "Quantitation of hepatitis C Virus RNA in Serum of Asymptomatic Blood Donors and Patients with Type C Chronic Liver Disease," <i>Hepatology</i> 17(4):545-550 (1993).	
		HANVEY, et al., "Antisense and Antigene Properties of Peptide Nucleic Acids," <i>Science</i> 258: 1481-1485 (1992).	
		HATA, et al., "Structure of the Human Ornithine Transcarbamylase Gene," <i>J. Biochem.</i> 103: 302-308 (1988).	
		HENDRICKSON, et al., "High sensitivity multianalyte immunoassay using covalent DNA-labeled antibodies and polymerase chain reaction," <i>Nucleic Acids Res.</i> 23(3):522-529 (1995).	
		HERMANSON, et al., eds., <i>Immobilized Affinity Ligands</i> , (Academic Press, New York, 1992).	
		HOLLOWAY, et al., "An exonuclease-amplification coupled capture technique improves detection of PCR product," <i>Nucleic Acids Research</i> 21:3905-3906 (1993).	
		HOY, et al., "Bromodeoxyuridine/DNA analysis of replication in CHO cells after exposure to UV light," <i>Mutation Research</i> 290:217-230 (1993).	
		HSUIH, et al., "Quantitative Detection of HCV RNA Using Novel Ligation-Dependent Polymerase Chain Reaction", <i>American Association for the Study of Liver Diseases</i> , (Chicago, IL, November 3-7, 1995) [poster abstract].	
		ITAKURA, et al., "Synthesis and Use of Synthetic Oligonucleotides," <i>Annual Review of Biochemistry</i> 53:323-356 (1984).	
		JACOBSEN, et al., "The N-Terminal Amino-Acid Sequences of DNA Polymerase I from <i>Escherichia coli</i> and of the Large and the Small Fragments Obtained by a Limited Proteolysis," <i>Eur. J. Biochem.</i> 45:623-627 (1974).	

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Sheet 7 of 16	Attorney Docket Number	VU-125 25006.000643	

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Hoe		JIANG, et al., "An efficient method for generation and subcloning of tandemly repeated DNA sequences with defined length, orientation and spacing," <i>Nucl. Acids Res.</i> 24:3278-3279 (1996).	
		JOHNSTONE & THORPE, <i>Immunochemistry In Practice</i> (Blackwell Scientific Publications, Oxford, England, 1987) pages 209-216 and 241-242.	
		JONSSON, et al., "Sequence of the DNA ligase-encoding gene from <i>Thermus scotoductus</i> and conserved motifs in DNA ligases," <i>Gene</i> 151(1&2):177-180 (1995).	
		JUNG, et al., "Bacteriophage PRD1 DNA polymerase: Evolution of DNA polymerases," <i>Proc. Natl. Acad. Sci. USA</i> 84:8287 (1987).	
		KABOORD & BENKOVIC, "Accessory proteins function as matchmakers in the assembly of the T4 DNA polymerase holoenzyme," <i>Current Biology</i> 5: 149-157 (1995).	
		KALIN, et al., "Evaluation of the ligase chain reaction (LCR) for the detection of point mutations," <i>Mutation Research</i> 283(2): 119-123 (1992).	
		KAPLAN, et al., "Rapid photolytic release of adenosine 5'-triphosphate from a protected analogue: utilization by the Na:K pump of human red blood cell ghosts" <i>Biochem.</i> 17:1929-1935 (1978).	
		KELLOGG, et al., "TaqStart Antibody <sup>TM</sup> : "Hot Start" PCR Facilitated by a Neutralizing Monoclonal Antibody Directed Against Taq DNA Polymerase," <i>Bio Techniques</i> 16(6):1134-1137 (1994).	
		KERKHOF, "A Comparison of Substrates for Quantifying the Signal from a Nonradiolabeled DNA Probe," <i>Analytical Biochemistry</i> 205:359-364 (1992).	
		KONG, et al., "Characterization of a DNA Polymerase from the Hyperthermophile Archaea <i>Thermococcus litoralis</i> ," <i>Journal of Biological Chemistry</i> 268:1965-1975 (1993).	

Examiner's Signature	<i>Keith A. Calvert</i>	Date Considered	03/04/2005
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Substitute for form 1449A/PTO		Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/396,340-  09/855,170
		Filing Date	September 16, 1999 May 14, 2001
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	1843
		Examiner Name	
Sheet 8 of 16	Attorney Docket Number	YU-125 25006.0006U3	

OTHER ART - NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher; city and/or country where published	Y <sup>2</sup>
Hec		KOOL, et al., "Circular oligonucleotides: New concepts in oligonucleotide design," <i>Annu. Rev. Biophys. Biomol. Struct.</i> 25:1-28 (1996).	
		KUNKEL, et al., "Rapid and Efficient Site-Specific Mutagenesis without Phenotypic Selection," <i>Methods in Enzymology</i> 154: 367-382 (1987).	
		LAMTURE, et al., "Direct detection of nucleic acid hybridization on the surface of a charge coupled device," <i>Nucl. Acids Res.</i> 22:2121-25 (1994).	
		LANDEGREN, "Molecular mechanics of nucleic acid sequence amplification," <i>Trends Genetics</i> 9:199-202 (1993).	
		LANDEGREN, et al., "A Ligase-Mediated Gene Detection Technique," <i>Science</i> 241:1077-1080 (1988).	
		LANGER, et al., "Enzymatic synthesis of biotin-labeled polynucleotides: Novel nucleic acid affinity probes," <i>Proc. Natl. Acad. Sci. USA</i> 78(11):6633-6637 (1981).	
		LAWYER, et al., "High-level Expression, Purification, and Enzymatic Characterization of Full-length <i>Thermus aquaticus</i> DNA Polymerase and a Truncated Form Deficient in 5' to 3' Exonuclease Activity," <i>PCR Methods Applications</i> 2(4): 275-287 (1993).	
		LEE, et al., "Coordinated leading and lagging strand DNA synthesis on a minicircular template," <i>Mol Cell.</i> 1(7):1001-10 (1998).	
		LEFRERE, et al., "Towards a new predictor of AIDS progression through the quantitation of HIV-1 DNA copies by PCR in HIV-infected individuals," <i>British Journal of Haematology</i> 82(2): 467-471 (1992).	
		LESNIK & FREIER, "Relative Thermodynamic Stability of DNA, RNA, and DNA:RNA Hybrid Duplexes: Relationship with Base Composition and Structure," <i>Biochemistry</i> 34: 10807-10815 (1995).	

Examiner's Signature	<i>Luella M. Clark</i>	Date Considered	03/04/2008
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Substitute for form 1449A/PTO		Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/996,340 09/955,170
		Filing Date	September 15, 1999 May 14, 2001
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	4643
		Examiner Name	
Sheet 9 of 16	Attorney Docket Number	YU 123 25006.000643	

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Nac		LIU, et al., "Rolling circle DNA synthesis: Small circular oligonucleotides as efficient templates for DNA polymerases," <i>J. Am. Chem. Soc.</i> 118:1587-1594 (1996).	
		LIZARDI, et al., "Cascade rolling circle amplification, a homogeneous fluorescence detection system for DNA diagnostics," <i>Clin. Chem.</i> 43: 2219-20 (1997).	
		LIZARDI, et al., "Mutation detection and single-molecule counting using isothermal rolling-circle amplification," <i>Nat Genet.</i> 19(3):225-32 (1998).	
		LOCKHART, et al., "Expression monitoring by hybridization to high-density oligonucleotide arrays," <i>Nature Biotechnology</i> 14:1675-1680 (1996).	
		LU, et al., "High Concentration of Peripheral Blood Mononuclear Cells Harboring Infectious Virus Correlates with Rapid Progression of Human Immunodeficiency Virus Type 1-Related Diseases," <i>JID</i> 168(5):1165-8116 (1993).	
		LUKYANOV, et al., "Molecule by molecule PCR amplification of complex DNA mixtures for direct sequencing: an approach to in vitro cloning," <i>Nucleic Acids Res.</i> 24(11):2194-5 (1996).	
		LUO, et al., "Improving the fidelity of <i>Thermus thermophilus</i> DNA ligase," <i>Nucl. Acids Res.</i> 24:3071-3078 (1996).	
		MARSHALL, et al., "Detection of HCV RNA by the asymmetric gap ligase chain reaction," <i>PCR Methods Appl.</i> 4(2):80-4 (1994).	
	MASKOS, et al., "Oligonucleotide hybridizations on glass supports: a novel linker for oligonucleotides synthesized <i>in situ</i> ," <i>Nucleic Acids Research</i> 20:1679-1684 (1992).		
	MATSUMOTO, et al., "Primary structure of bacteriophage M2 DNA polymerase: conserved segments within protein-priming DNA polymerases and DNA polymerase I of <i>Escherichia coli</i> ," <i>Gene</i> 84(2): 247-255 (1989).		

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/990,340  09/855,70
		Filing Date	September 16, 1999 May 14, 2001
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	1643
		Examiner Name	
Sheet 10 of 16	Attorney Docket Number	YU 125 25006-000643	

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Hpc		MCCRAY, et al., "A new approach to time-resolved studies of ATP-requiring biological systems: Laser flash photolysis of caged ATP," <i>Proc. Natl. Acad. Sci. USA</i> 77:7237-7241 (1980).	
		MCGRAW, et al., "Sequence-dependant oligonucleotide-target duplex stabilities: rules from empirical studies with a set of twenty-mers," <i>Biotechniques</i> 8:674-678 (1990).	
		MELTON, et al., "Efficient in vitro synthesis of biologically active RNA and RNA hybridization probes from plasmids containing a bacteriophage SP6 promoter," <i>Nucleic Acids Res.</i> 12(18):7035-56 (1984).	
		METZKER, et al., "Termination of DNA synthesis by novel 3'-modified-deoxyribonucleoside 5'-triphosphates" <i>Nucleic Acids Research</i> 22:4259-4267 (1994).	
		MUJUMDAR, et al., "Cyanine dye labeling reagents containing isothiocyanate groups" <i>Cytometry</i> 10:11-19 (1989).	
		NARANG, et al., "Chemical Synthesis of Deoxyoligonucleotides by the Modified Triester Method", <i>Methods Enzymology</i> 65:610-620 (1980).	
		NEWTON, et al., "Analysis of any point mutation in DNA. The amplification refractory mutation system (ARMS)," <i>Nucleic Acids Res.</i> 17(7):2503-16 (1989).	
		NIELSEN, et al., "Peptide Nucleic Acid (PNA). A DNA Mimic with a Peptide Backbone," <i>Bioconjugate Chemistry</i> , 5: 3-7 (1994).	
		NIELSEN, et al., "Peptide nucleic acids (PNAs): Potential anti-sense and anti-gene agents," <i>Anti-Cancer Drug Design</i> , 8: 53-63 (1993).	
		NIKIFOROV, et al., "Genetic Bit Analysis: a solid phase method for typing single nucleotide polymorphisms," <i>Nucleic Acids Res.</i> 22(20):4167-75 (1994).	

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		Application Number	09/396,340  09/855,170
		Filing Date	September 15, 1999 May 14, 2001
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	1643
		Examiner Name	
Sheet 11 of 16	Attorney Docket Number	W0125 25006-000403	

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hce		NIKIFOROV, et al., "The Use of Phosphorothioate Primers and Exonuclease Hydrolysis for the Preparation of Single-stranded PCR Products and their Detection by Solid-phase Hybridization," <i>PCR Methods and Applications</i> 3: 285-291 (1994).	
		NILSSON, et al., "Padlock Probes: Circularizing Oligonucleotides for Localized DNA Detection," <i>Science</i> 265: 2085-2088 (1994).	
		NILSSON, et al., "Padlock probes reveal single-nucleotide differences, parent of origin and in situ distribution of centromeric sequences in human chromosomes 13 and 21," <i>Nat Genet.</i> 16(3):252-5 (1997).	
		ØRUM, et al., "Single base pair mutation analysis by PNA directed PCR clamping," <i>Nucleic Acids Research</i> 21(23):5332-5336 (1993).	
		PANASENKO, et al., "A Simple, Three-Step Procedure for the Large Scale Purification of DNA Ligase from a Hybrid λ Lysogen Construction in Vitro," <i>Journal Biological Chemistry</i> 253:4590-4592 (1978).	
		PARKER, et al., "Targeted gene walking polymerase chain reaction," <i>Nucl. Acids Res.</i> 19:3055-60 (1991).	
		PEASE, et al., "Light-generated oligonucleotide arrays for rapid DNA sequence analysis," <i>Proc. Natl. Acad. Sci. USA</i> 91(11):5022-5026 (1994).	
		PIATAK, et al., "High Levels of HIV-1 in Plasma During All Stages of Infection Determined by Competitive PCR," <i>Science</i> 259(5102):1749-1754 (1993).	
		PILLAI, et al., "Photoremovable protecting groups in organic synthesis," <i>Synthesis</i> 1-26 (1980).	
		POKROVSKAYA & GUREVICH, "In vitro transcription: preparative RNA yields in analytical scale reactions," <i>Anal Biochem.</i> 220(2):420-3 (1994).	

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		Filing Date	September 13, 1999 May 14, 2001
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	1643
		Examiner Name	
Sheet 12 of 16	Attorney Docket Number	YU 125 25006.000605	

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MLC		PRAKASH & KOOL, "Structural effects in the recognition of DNA by circular oligonucleotides," <i>J. Amer. Chem. Soc.</i> 114:3523-3527 (1992).	
		RAMSING, et al., "Helix-coil transition of parallel-stranded DNA. Thermodynamics of hairpin and linear duplex oligonucleotides," <i>Biochem.</i> 28:9528-9535 (1989).	
		RICHARDS, et al., "Conditional mutator phenotypes in hMS2H2-deficient tumor cell lines," <i>Science</i> 277:1523-1526 (1997).	
		RIED, et al., "Simultaneous visualization of seven different DNA probes by in situ hybridization using combinatorial fluorescence and digital imaging microscopy," <i>Proc Natl Acad Sci U S A.</i> 89(4):1388-92 (1992).	
		RIGLER & ROMANO, "Differences in the Mechanism of Stimulation of T7 DNA Polymerase by Two Binding Modes of <i>Escherichia coli</i> Single-stranded DNA-binding Protein," <i>Journal of Biological Chemistry</i> , 270(15): 8910-8919 (1995).	
		RYCHLIK, et al., "Optimization of the annealing temperature for DNA amplification <i>in vitro</i> ," <i>Nucleic Acids Research</i> 18(21): 6409-6412 (1990).	
		RYS & PERSING, "Preventing false positives: quantitative evaluation of three protocols for inactivation of polymerase chain reaction amplification products," <i>J Clin Microbiol.</i> 31(9):2356-60 (1993).	
		SAKSELA, et al., "Human immunodeficiency virus type 1 mRNA expression in peripheral blood cells predicts disease progression independently of the numbers of CD4 <sup>+</sup> lymphocytes," <i>Proc. Natl. Acad. Sci. USA</i> 91(3): 1104-1108 (1994).	
		SAMBROOK, et al., "Molecular Cloning: A Laboratory Manual, Second Edition" (Chapters 5, 6), <i>Cold Spring Harbor Laboratory Press</i> , Cold Spring Harbor, N.Y., 1989.	
		SARIS, et al., "Blotting of RNA onto ion exchange paper allowing subsequent characterization by in situ translation in addition to blot hybridization," <i>Nucleic Acids Res.</i> 10(16):4831-43 (1982).	

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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/398,340  09/855,170
		Filing Date	September 15, 1999 May 14, 2000
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	1649
		Examiner Name	
Sheet 13 of 16	Attorney Docket Number	44125	25006-0006.03

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fee		SCHENA, et al., "Quantitative Monitoring of Gene Expression Patterns with a Complementary DNA Microarray," <i>Science</i> 270:467-470 (1995).	
		SCHENA, et al., "Parallel human genome analysis: Microarray-based expression monitoring of 1000 genes," <i>Proc. Natl. Acad. Sci. USA</i> 91:10614-10619 (1994).	
		SCHENBORN & MEIRENDORF, "A novel transcription property of SP6 and 17 RNA polymerases: dependence on template structure," <i>Nucleic Acids Research</i> 13(17):6223-6236 (1985).	
		SCHWARZ, et al., "Improved yields of long PCR products using gene 32 protein," <i>Nucl. Acid Res.</i> 18:1079 (1989).	
		SIEGAL, et al., "A Novel DNA Helicase from Calf Thymus," <i>Journal of Biological Chemistry</i> 267(19): 13629-13635 (1992).	
		SKALITER & LEHMAN, "Rolling circle DNA replication <i>in vitro</i> by a complex of herpes simplex virus type 1-encoded enzymes," <i>Proc. Natl. Acad. Sci. USA</i> 91(22):10665-10669 (1994).	
		SPEICHER, et al., "Karyotyping human chromosomes by combinatorial multi-fluor FISH," <i>Nature Genetics</i> 12(4): 368-375 (1996).	
		STIMPSON, et al., "Real-time detection of DNA hybridization and melting on oligonucleotide arrays by using optical wave guides," <i>Proc. Natl. Acad. Sci. USA</i> 92(14):6379-6383 (1995).	
		STRAUSS & JACOBOWITZ, "Quantitative measurement of calcitonin and beta-actin mRNA [correction of mRNA] in rat brain micropunches without prior isolation of RNA," <i>Mol Brain Res.</i> 20(3):229-39 (1993).	
		STRONG, et al., "Marked improvement of PAC and BAC cloning is achieved using electroelution of pulsed-field gel-separated partial digests of genomic DNA," <i>Nucleic Acids Res.</i> 25(19):3959-61 (1997).	

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<b>Substitute for form 1449A/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	09/396,340  09/855,170
		Filing Date	September 15, 1999 May 14, 2001
		First Named Inventor	Paul M. Lizardi
		Group Art Unit	4643
		Examiner Name	
Sheet 14 of 16	Attorney Docket Number	YU 125 25006.0004U3	

OTHER ART – NON PATENT LITERATURE DOCUMENTS			
Examiner's Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
KGC		STUDIER, et al., "Use of T7 RNA Polymerase to Direct Expression of Cloned Genes," <i>Methods in Enzymology</i> 185: 60-89 (1990).	
		SYVANEN, et al., "Fast quantification of nucleic acid hybrids by affinity-based hybrid collection," <i>Nucleic Acids Res.</i> 14(12):5037-48 (1986).	
		TABOR & RICHARDSON, "Selective inactivation of the exonuclease activity of bacteriophage T7 DNA polymerase by in vitro mutagenesis," <i>J. Biol. Chem.</i> 264:6447-6458 (1989).	
		TABOR & RICHARDSON, "Selective oxidation of the exonuclease domain of bacteriophage T7 DNA polymerase," <i>J. Biol. Chem.</i> 262:15330-15333 (1987).	
		TAYLOR, ed, <u>Protein immobilization: fundamentals and applications</u> (M. Dekker, New York, 1991).	
		TSURUMI, et al., "Functional Interaction between Epstein-Barr Virus DNA Polymerase Catalytic Subunit and Its Accessory Subunit In Vitro," <i>Journal of Virology</i> 67(12):7648-7653 (1993).	
		TYAGI & KRAMER, "Molecular beacons: probes that fluoresce upon hybridization," <i>Nature Biotechnology</i> 14:303-308 (1996).	
		VELCULESCU, et al., "Serial analysis of gene expression," <i>Science</i> . 270(5235):484-7 (1995).	
		VILLEMMAIN & GIEDROC, "The N-terminal B-domain of T4 gene 32 protein modulates the lifetime of cooperatively bound Gp32-ss nucleic acid complexes," <i>Biochemistry</i> . 35(45):14395-404 (1996).	
		VOGELSTEIN, et al., "Supercoiled loops and eucaryotic DNA replicaton," <i>Cell</i> . 22(1 Pt 1):79-85 (1980).	

Examiner's Signature		Date Considered	03/04/2001
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		Application Number 09/396,348 09/855,170	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Filing Date	
		First Named Inventor	
		Group Art Unit	
		Examiner Name	
Sheet	15	of	16
		Attorney Docket Number	
		YU 125- 25006, P00443	

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WAG		WAGGONER, "Covalent labeling of proteins and nucleic acids with fluorophores," <i>Meth. Enzymology</i> 246:362-373 (1995)	
		WALKER & LINN, "Detection of Mycobacterium tuberculosis DNA with thermophilic strand displacement amplification and fluorescence polarization," <i>Clin Chem.</i> 42(10):1604-8 (1996).	
		WALKER, et al., "Strand displacement amplification--an isothermal, in vitro DNA amplification technique," <i>Nucleic Acids Res.</i> 20(7):1691-6 (1992).	
		WALTER & STRUNK, "Strand displacement amplification as an in vitro model for rolling-circle replication: deletion formation and evolution during serial transfer," <i>Proc Natl Acad Sci U S A.</i> 91(17):7937-41 (1994).	
		WANSINK, et al., "Fluorescent Labeling of Nascent RNA Reveals Transcription by RNA Polymerase II in Domains Scattered Throughout the Nucleus," <i>Journal of Cell Biology</i> 122(2): 283-293 (1993).	
		WIEDMANN, et al., "Ligase Chain Reaction (LCR) - Overview and Applications," <i>PCR Methods and Applications</i> (Cold Spring Harbor Laboratory Press, Cold Spring Harbor Laboratory, NY, 1994) pages S51-S64.	
		WINN-DEEN, et al., "Non-radioactive detection of Mycobacterium tuberculosis LCR products in a microtitre plate format," <i>Molecular and Cellular Probes</i> (England) 7(3):179-186 (1993).	
		YOUNG & ANDERSON, "Quantitative analysis of solution hybridisation," <i>Nucleic Acid Hybridisation: A Practical Approach</i> pages 47-71 (IRL Press, 1985).	
		YU, et al., "Cyanine dye dUTP analogs for enzymatic labeling of DNA probes," <i>Nucleic Acids Research</i> 22(15): 3226-3232 (1994).	
		ZEHAVI, et al., "Light sensitive glycosides. I. 6-Nitroveratryl β-D-Glucopyranoside and 2-Nitrobenzyl β-D-Glucopyranoside," <i>J. Organic Chem.</i> 37:2281-2288 (1972).	

Examiner's Signature	<i>Keith R. Chute</i>	Date Considered	03/04/2005
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Substitute for form 1449A/PTO				Complete If Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Application Number	69/396,340  09/855,170
				Filing Date	September 16, 1998 May 14, 2000
				First Named Inventor	Paul M. Lizardi
				Group Art Unit	1643
				Examiner Name	
				Attorney Docket Number	10125 25006-000643
Sheet	16	of	16		

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Examiner's Signature	<i>Keith E. Calvert</i>	Date Considered	<i>08/04/2005</i>
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<p>Substitute for form 1449A/PTO</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>				Complete if Known	
				Application Number	09/936,340 <b>09/855,170</b>
				Filing Date	September 13, 1999 <b>May 14, 2001</b>
				First Named Inventor	Paul M. Lizardi
				Group Art Unit	1643
				Examiner Name	
Sheet 1 of 1	Attorney Docket Number	YU-125-25006-0006U3			

FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office <sup>2</sup>	Number <sup>3</sup>	Kind Code <sup>4</sup> (if known)			
Hce		EP	0 640 691	A2	Becton Dickinson and Co.	03-01-1995	
		WO	96/00795	A2	Kalyx Biosciences, Inc.	01-11-1996	
		WO	97/20948	A1	Koch	06-12-1997	
		WO	98/39485	A2	The Regents of the University of Michigan	09-11-1998	

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Hce		UNRAU & DEUGAU, "Non-cloning amplification of specific DNA fragments from whole genomic DNA digests using DNA 'indexers'" <i>Gene</i> 145:163-9 (1994).	
Hce		WHITE, et al., "Concatemer chain reaction: A Taq DNA polymerase-mediated mechanism for generating long tandemly repetitive DNA sequences," <i>Analytical Biochemistry</i> 199:184-90 (1991).	
Hce		ZHANG, et al., "Amplification of target-specific, ligation-dependent circular probe," <i>Gene</i> 211:277-85 (1998).	

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